WHAT IS CLAIMED IS:

1. An FDM-CDMA transmission method comprising the steps of:

assigning N (N is an integer of 1 or more) pieces of digital data to N frequency channels for modulation and transmission using the frequency division multiplex (FDM) method; and

performing spread modulation on N pieces of digital data by the code division multiple access (CDMA) method before the modulation.

2. An FDM-CDMA transmission method as claimed in claim 1, further comprising the steps of:

generating N vectors, as spreading codes, which are +1 or –1 polarity and are unique to users; and

multiplying the nth (n is an integer from 1 to N) digital data and the nth vector corresponding thereto, and wherein:

the spread modulation is performed on the N pieces of digital data by executing each of the steps.

3. An FDM-CDMA transmission method as claimed in claim 1, wherein:

the N frequency channels are divided into a plurality of groups, and independent digital data is assigned to each of the groups.

4. An FDM-CDMA transmission method as claimed in claim 1, wherein:

the spread modulation is performed only on the frequency channel adopting the FDM-CDMA method when FDM-method broadcasting and FDM-CDMA-method communication are used together for transmission.

5. An FDM-CDMA receiving method in which N (N is an integer of 1 or above) pieces of digital data are assigned to N frequency channels and are modulated and transmitted by the frequency division multiplex (FDM) method, the receiving method comprising the steps of:

performing demodulation according to FDM method on the received signals, when signals are received in which spread modulation has been performed according to the code division multiple access (CDMA) method, on N pieces of digital data before the modulation; and

performing inverse spread modulation according to the CDMA method on the N pieces of digital data after modulation.

6. An FDM-CDMA receiving method as claimed in Claim 5, further comprising the steps of:

generating N vectors, as inverse spreading codes, which are +1 or −1 polarity and which are unique to users at a transmission side; and

multiplying the nth (n is an integer of 1 to N) digital data before the demodulation and the nth vector corresponding thereto, and wherein:

the inverse spread modulation is performed on the N pieces of digital data after the demodulation by executing each of the steps.

7. An FDM-CDMA receiving method as claimed in claim 5, further comprising the step of:

selecting and adding, for each group, only frequency channels belonging to the same group after the inverse spread modulation, when signals are received in which the N frequency channels are divided into a plurality of groups and independent digital data are assigned to each of the groups.

8. An FDM-CDMA receiving method as claimed in claim 5, further comprising the step of:

performing the inverse spread modulation on the frequency channel adopting the FDM-CDMA method when FDM-method broadcasting and the FDM-CDMA-method communication are used together for receiving.

9. An FDM-CDMA transmitting device, comprising:

a frequency division multiplex (FDM) circuit for assigning N (N is

an integer of 1 or above) pieces of digital data to N frequency channels for modulation according to the FDM method;

a spreading code setting circuit for generating N spreading codes unique to users; and

a multiplier for multiplying the nth (n is an integer from 1 to N) before the modulation and the nth spreading code corresponding thereto for outputting the digital data after the multiplication to an FDM combining circuit.

10. An FDM-CDMA transmitting device as claimed in claim 9, wherein:

the spreading code setting circuit generates N vectors, as spreading codes, which are either +1 or −1 polarity.

11. An FDM-CDMA transmitting device as claimed in claim 9, further comprising:

a signal dividing circuit for dividing the N frequency channels into a plurality of groups and for assigning independent digital data to each of the groups.

12. An FDM-CDMA transmitting device as claimed in claim 10, wherein:

the spreading code setting circuit only generates the spreading codes corresponding to the frequency channels used in the FDM-CDMA method when FDM- method broadcasting and the FDM-CDMA-method communication are used together for transmission.

13. An FDM-CDMA receiving device, in which N (N is an integer of 1 or above) pieces of digital data are assigned to N frequency channels and are modulated and transmitted according to the frequency division multiplex (FDM) method, the receiving device comprising:

a frequency division multiplex (FDM) separating circuit for receiving signals on which spread modulation according to the code division multiple access (CDMA) method has been performed on N pieces of digital data before the modulation, then performing demodulation according to the FDM method on the received signals, and outputting N pieces of digital data after the demodulation;

an inverse spreading code setting circuit for generating N inverse spreading codes inherent to users at a transmission side; and

a multiplier for multiplying the nth (n is an integer from 1 to N) digital data after the demodulation and the nth inverse spreading code corresponding thereto.

14. An FDM-CDMA receiving device as claimed in claim 13, wherein:

the inverse spreading code setting circuit generates N vectors, as inverse spreading codes, which are +1 or –1 polarity and are unique to users at the transmission side.

15. An FDM-CDMA receiving device as claimed in claim 13, further comprising:

a selecting/adding circuit for selecting and adding, for each group, only frequency channels belonging to the same group after the inverse spread modulation, when signals are received in which the N frequency channels are divided into a plurality of groups and independent digital data is assigned to each of the groups.

16. An FDM-CDMA receiving device as claimed in claim 14, wherein:

the inverse spreading code setting circuit only generates the inverse spreading codes corresponding to the frequency channels used in the FDM-CDMA method when FDM- method broadcasting and FDM-CDMA-method communication are used together for reception.